Cotton/Soybean Insect Newsletter

Volume 15, Issue #17 Edisto Research & Education Center in Blackville, SC 28 August 2020

Pest Patrol Alerts

The information contained herein each issue is available via text alerts that direct users to online recordings. I will update the short message often for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen the in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at **@bugdocisin** on Twitter.

News from Around the State

Tom Smith, local consultant, reported that "a number of early planted [cotton] fields [are done] until defoliation, and a number of later planted fields may need 1 or 2 sucking bug sprays and bollworm protection. We treated a few fields last week for target spot and mildew. I have observed some unusual piercing sucking species in cotton over last couple/few years." (Pics here – I identified them as the spot-sided coreid and the helmeted squash bug, but I could be incorrect. Everyone has seen our friend the tree frog out there, I'm sure.) **Drake Perrow**, crop consultant in Cameron, SC, reported that "where pyrethroids went out last week, many fields are having to be retreated with the big guns [more expensive insecticides for bollworm] this week." **Fleming McMaster**, local crop consultant, called with a report of many VBC in soybeans. I can confirm that we have good pressure from VBC right now in soybeans in the southern portion of the state. Send me your reports for this section!





Upcoming Virtual Field Days

Clemson University will be offering a handful of virtual field days this fall. Tentatively, the Edisto REC field day will go live on 10 September, but it should remain up for some time to allow folks to participate

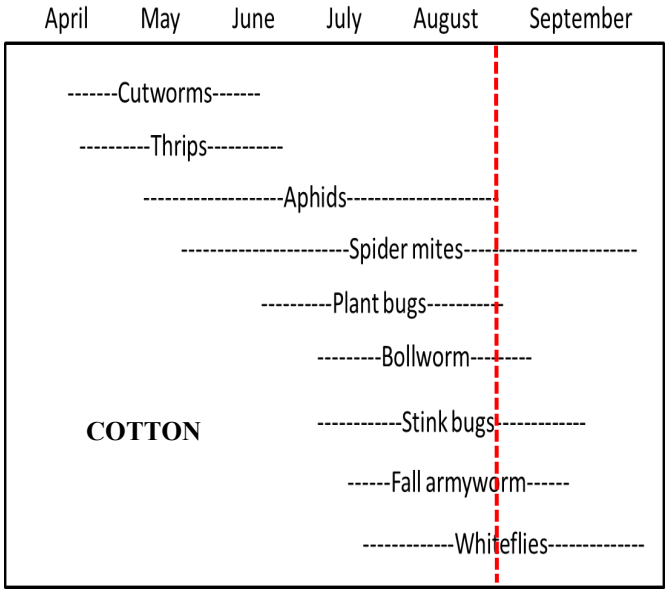
when they can. We are working on ways to provide certification credits for watching segments. Here are links to more details about proposed times for all field days: https://agfax.com/2020/08/19/clemson-fall-field-days-will-be-online-this-year/ https://www.clemson.edu/cafls/research/fieldday/

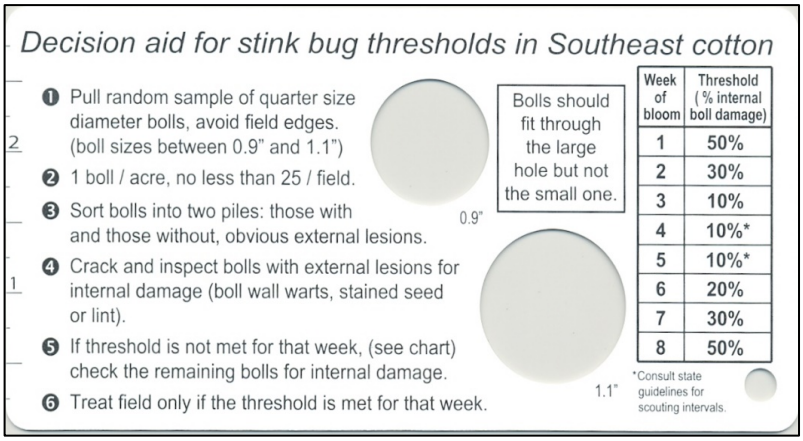
Cotton Situation

As of 23 August 2020, the USDA NASS South Carolina Statistical Office estimated that about 93% of the crop is squaring, compared with 90% at this time last week, 100% at this time last year, and 99% for the 5-year average. About 83% of the crop is setting bolls, compared with 75% at this time last week, 98% at this time last year, and 93% for the 5-year average. About 2% of bolls are opening, compared with 0% at this time last week, 20% at this time last year, and 11% for the 5-year average. The condition of the crop was described as 17% excellent, 51% good, 16% fair, 9% poor, and 7% very poor. These are observed/perceived state-wide averages.

Cotton Insects

We are in a holding pattern with high trap captures of bollworm in pheromone traps and stink bugs really standing out in the crop. Any late-planted, 2-gene Bt cotton should be watched for bollworm. Bollworm captures were high but trending down on the last check, so we might be on the decline next week. Just look after the late-planted cotton to make sure nothing is getting through. Pressure from stink bugs has picked up to end "stink bug month" around here, and they are easy to spot on bolls. Keep using the dynamic boll-injury threshold for stink bugs to finish the season. Most fields are probably in the 5th to 7th week of bloom.

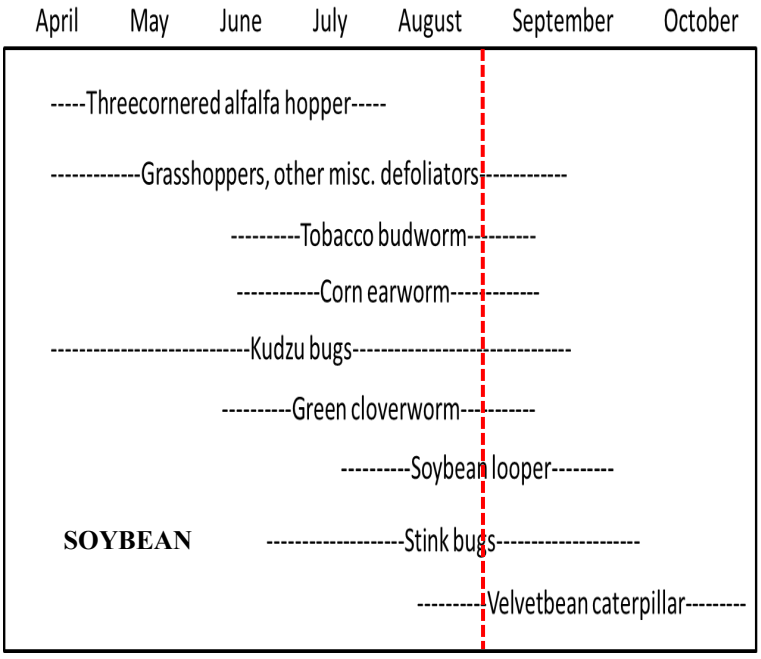




Soybean Situation

As of 23 August 2020, the USDA NASS South Carolina Statistical Office estimated that about 81% of the crop is blooming, compared with 68% the previous week, 84% at this time last year, and 85% for the 5-year average. About 47% of the crop is setting pods, compared with 37% the previous week, 38% at this time last year, and 45% for the 5-year average. The condition of the crop was described as 30% excellent, 51% good, 9% fair, 4% poor, and 6% very poor. These are observed/perceived state-wide averages.

Soybean Insects



Defoliation has really picked up this week, as velvetbean caterpillar (VBC) has joined forces with soybean looper (SBL) to seriously chow down on foliage in the crop. Things can happen quickly with VBC. My crew and I collected hundreds of very large VBC this morning with ease, and I sprayed an efficacy trial for VBC to see what products will clean them up this season. I will report back next week on that. If you remember from last year, we had a troublesome population of this migratory species show up in spots in the state that were very tough to control with many insecticides. Hopefully, VBC are easy to take out this year. I should know on Monday. Continue to watch this complex of defoliating caterpillars, and don't let defoliation exceed 15% once pods are filling. Use a sweep net or a drop cloth to make counts of insects to see what species you have, as insecticide choice depends on proper identification of species. Any late-planted soybeans that are just now blooming should be checked for podworm (same as bollworm), for sure, as numbers moths in pheromone traps were high again this week. Also, stink bugs are our number one insect pest group of soybeans in the state, and they have exploded in the crop. Make sure you are checking for stink bugs and treating if you have more than 1 per rowft (38" row spacing) or 1-2 per 10 sweeps. Redbanded stink bugs are still out there in the mix again this season, and they can be tougher to control. Treatment thresholds for the major insect pests are shown on Tables 1-3 on the next page. Those include drop-cloth and sweep-net thresholds. See our Pest Management Handbook for more details and recommendations on insecticide choice.

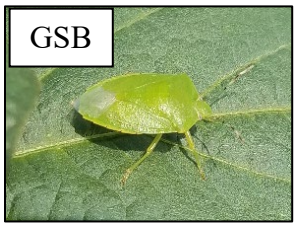


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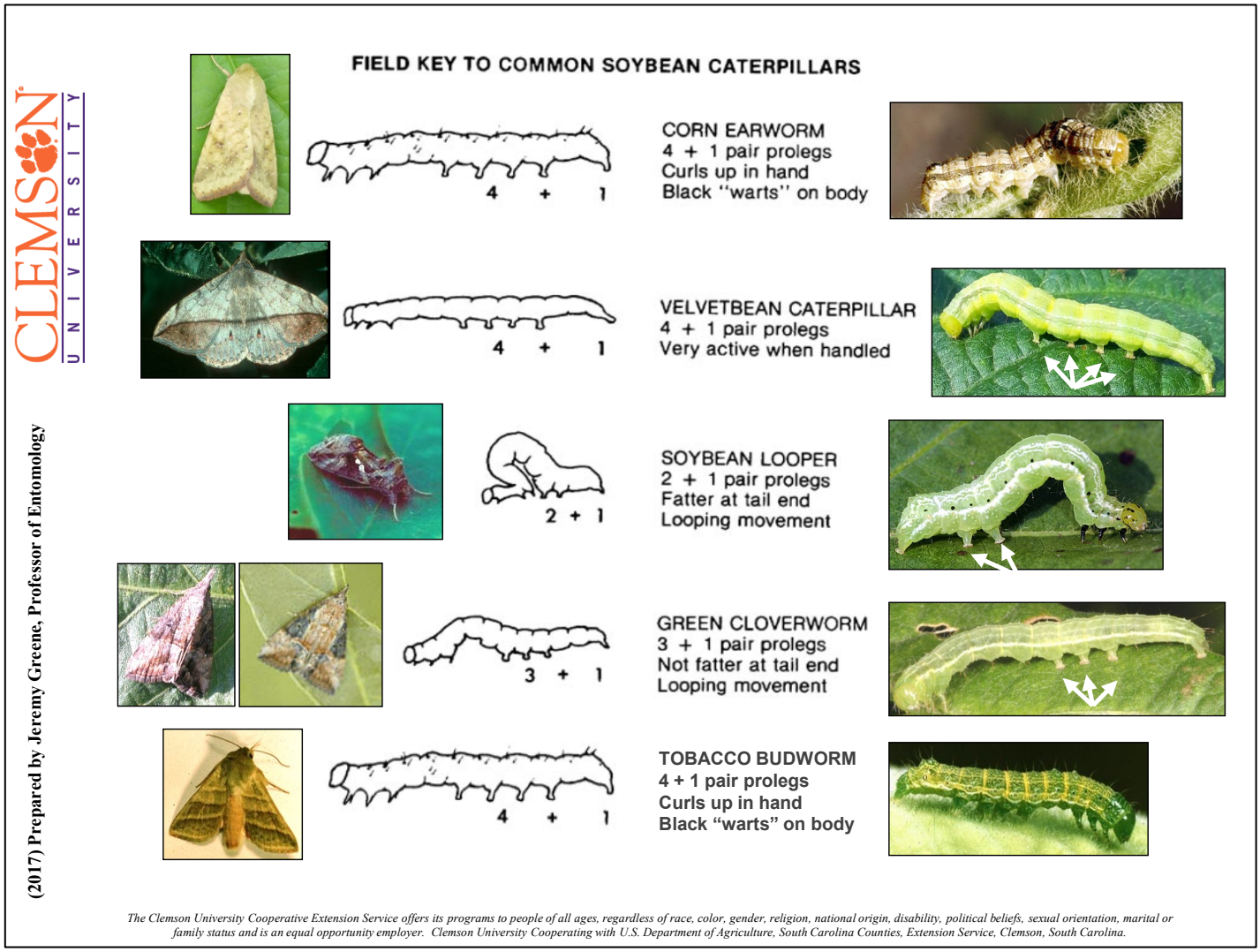
Table 1. Treatment thresholds **(per row ft)** for soybean insects sampled with beat cloth.					
Pest	Row width (inches)				
	38	30	21	14	7
stink bug	1	0.8	0.5	0.3	0.2
corn earworm*	2	1.6	1.1	0.7	0.4
velvetbean caterpillar	4-6	4	2.7	1.8	0.9
soybean looper	6-8	5.5	3.8	2.6	1.3
*this is the pod-feeding threshold for corn earworm					

Table 2. Treatment thresholds **(per 3 row ft)** for soybean insects sampled with beat cloth.					
Pest	Row width (inches)				
	38	30	21	14	7
stink bug	3	2.4	1.6	1.1	0.5
corn earworm*	6	4.7	3.3	2.2	1.1
velvetbean caterpillar	12-18	12	8.3	5.5	2.7
soybean looper	18-24	16	11.6	7.7	3.8
*this is the pod-feeding threshold for corn earworm					

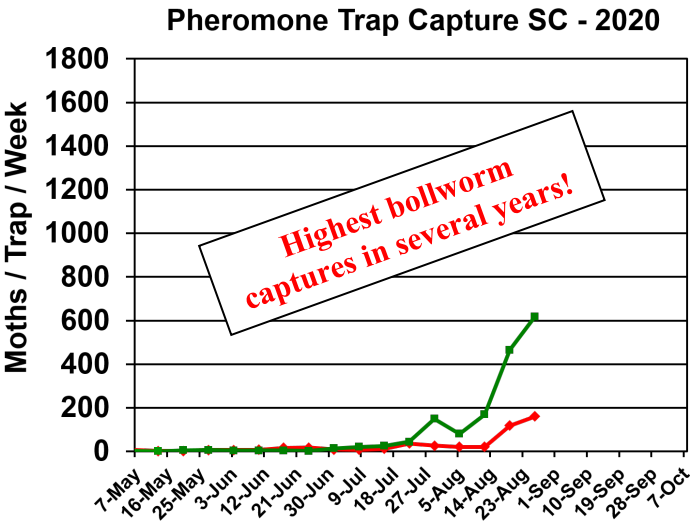
Table 3. Treatment guidelines for soybean insects sampled with a sweep net.		
Pest	Number per 10 sweeps	Comments
stink bug	1-2	
corn earworm	3	or 15% foliage loss
velvetbean caterpillar	10	or 15% foliage loss
soybean looper	15	or 15% foliage loss
kudzu bug	10 (nymphs)	1 nymph per sweep
For other foliage feeders use a threshold of 30% defoliation before first bloom, 15% after first bloom.		

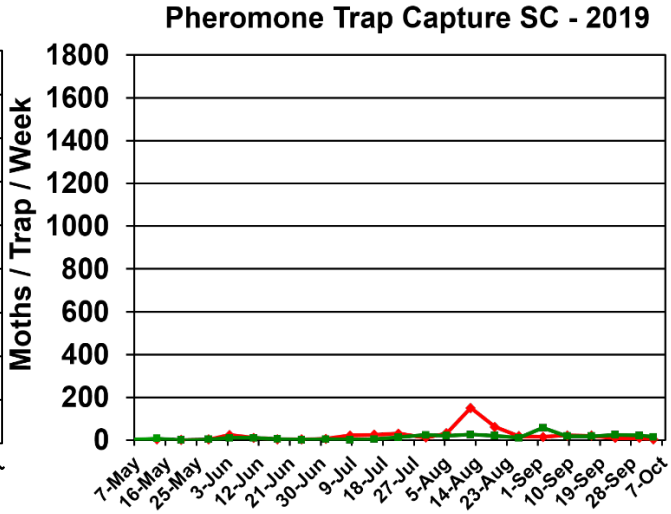
Be able to recognize larvae and moths! Use the chart here for identifying adults and larvae.



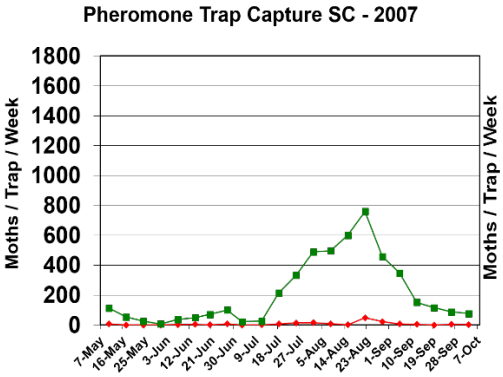
Bollworm & Tobacco Budworm

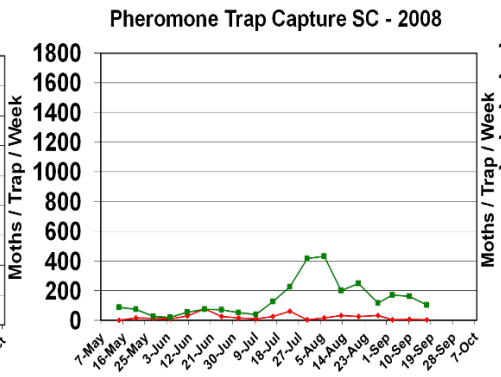
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2019 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

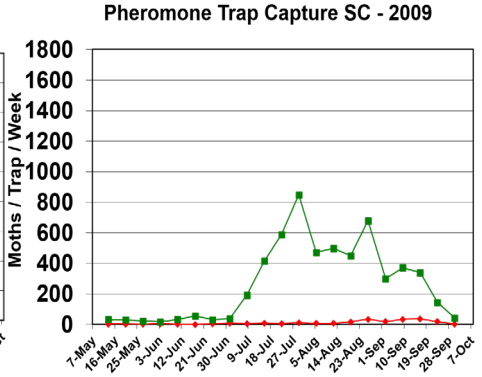


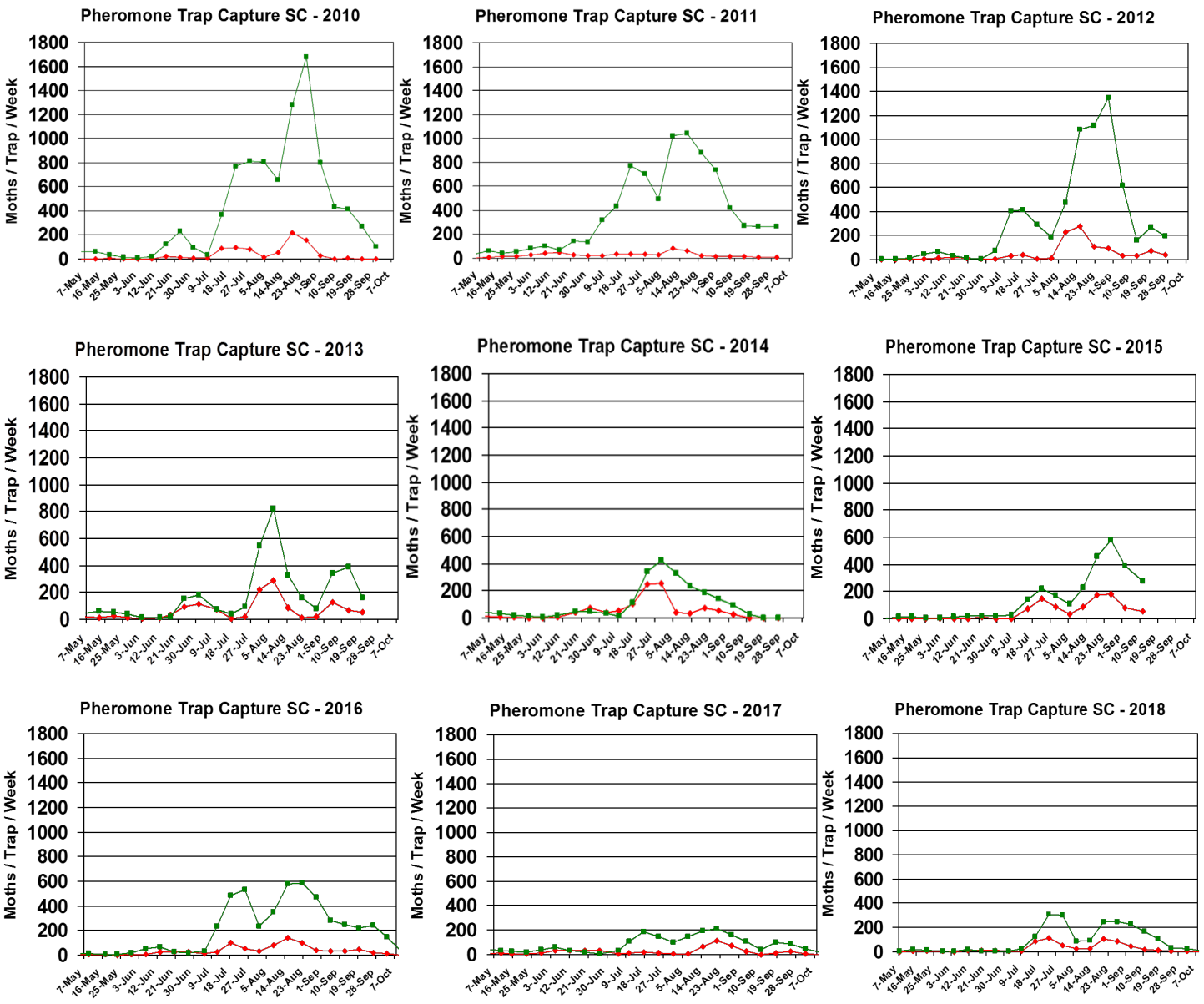


Trap data from 2007-2018 are shown below for reference to other years of trapping data from EREC:





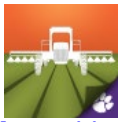




Pest Management Handbook – 2020

Insect control recommendations are available online in the 2020 South Carolina Pest Management Handbook at:
https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

Free Mobile Apps: "Calibrate My Sprayer" and "Mix My Sprayer"



Download our free mobile apps called "Calibrate My Sprayer" and "Mix My Sprayer" that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats):
http://www.clemson.edu/extension/mobile-apps/

Need More Information?

For more Clemson University Extension information: http://www.clemson.edu/extension/

For historical cotton/soybean insect newsletters:
https://www.clemson.edu/extension/agronomy/cotton1/newsletters.html

Sincerely,

Jeremy K. Greene, Ph.D.
Professor of Entomology

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http://www.clemson.edu